Amendments to the Claims:

Please cancel claims 1-14, and amend the remaining claims as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (Canceled)

15. (Currently amended) The system of claim ~~13~~20, wherein the intake manifold temperature is maintained within a range of about 40 degrees Fahrenheit above the dew-point temperature.

16. (Currently amended) The system of claim ~~14~~20, wherein the intake manifold temperature is maintained within a range of about 30 degrees Fahrenheit above the dew-point temperature.

17. (Currently amended) The system of claim ~~14~~20, wherein the intake manifold temperature is maintained within a range of about 20 degrees Fahrenheit above the dew-point temperature.

18. (Currently amended) ~~The system of claim 14,~~ A charge air cooler bypass system, comprising:

a turbocharger that compresses air before it enters a charge air cooler;

a charge air cooler that reduces the temperature of the air from the turbocharger before it enters an engine intake; and

a bypass system that mixes higher temperature bypassed air with air from the charge air cooler to create a mixed boost-air temperature that is just above the dew-point temperature so as to inhibit condensation and the formation of acids;

wherein the bypass system includes:

a bypass valve that allows turbo-boosted charged air to bypass a charge-air cooler;

and

a bypass valve controller that inhibits condensation buildup in an intake manifold or power cylinder by maintaining an intake manifold temperature just above the dew-point temperature; and

wherein said bypass valve has two-ports and two respective valve plates that are configured to be actuated substantially inversely proportionally.

19. (Original) The system of claim 18, wherein the bypass valve controller causes a single actuator to actuate both valve plates.

20. (Currently amended) ~~The system of claim 14,~~ A charge air cooler bypass system, comprising:

a turbocharger that compresses air before it enters a charge air cooler;

a charge air cooler that reduces the temperature of the air from the turbocharger before it enters an engine intake; and

a bypass system that mixes higher temperature bypassed air with air from the charge air cooler to create a mixed boost-air temperature that is just above the dew-point temperature so as to inhibit condensation and the formation of acids;

wherein the bypass system includes:

a bypass valve that allows turbo-boosted charged air to bypass a charge-air cooler; and

a bypass valve controller that inhibits condensation buildup in an intake manifold or power cylinder by maintaining an intake manifold temperature just above the dew-point temperature;

wherein the bypass valve includes two valves in a single valve body.

21. (Currently amended) The system of claim ~~14~~20, wherein said controller is configured to control said bypass valve to cause substantially no condensation to be present in said intake manifold during operation.

22. (Currently amended) The system of claim ~~1~~20, wherein said controller is configured to control said bypass valve to achieve substantially the lowest possible NOx emissions by allowing the use of EGR at low ambient temperatures.

23. (Currently amended) The system of claim ~~1~~20, wherein said controller is adapted to activate said bypass valve so as to quicken engine warm-up.

24. (Currently amended) The system of claim ~~1~~20, wherein said controller is adapted to activate said bypass valve so as to increase engine-braking power by introducing higher temperature expanded air during braking.

25. (Currently amended) The system of claim ~~1~~20, wherein said controller includes an engine control unit that provides an output that drives the bypass valve to proportionally control the amount of charge-air that is bypassed within a range of about 0 - 100% while simultaneously diverting charge-air cooler return.

26. (Currently amended) The system of claim ~~1~~20, wherein said controller is configured to control said bypass valve to run exhaust gas recirculation even at low ambient temperatures.

27. (Original) The system of claim 26, wherein said controller is configured to control said bypass valve to run exhaust gas recirculation even at ambient temperatures of below 25 degrees F.

28. (Original) The system of claim 26, wherein said controller is configured to control said bypass valve to run exhaust gas recirculation even at ambient temperatures of below 15 degrees F.

29. (Original) The system of claim 26, wherein said controller is configured to control said bypass valve to run exhaust gas recirculation even at ambient temperatures of below 5 degrees F.

30. (Original) An internal combustion engine having at least one cylinder, an intake, a charge air cooler, and an exhaust gas re-circulator, said charge air cooler providing cooled intake air for delivery into said intake, and said exhaust gas re-circulator for introducing exhaust gas into said intake, comprising:

a charge air cooler bypass valve for diverting a first mass flow rate of intake air around the charge air cooler and into the intake manifold when said exhaust gas re-circulator is introducing exhaust gas into said intake;

a charge air cooler throttle valve for reducing a flow of said cooled intake air into the intake manifold from the charge air cooler by a second mass flow rate when said exhaust gas re-circulator is introducing exhaust gas into said intake; and

means for controlling said bypass and throttle valves to cause said intake air diverted around said charge air cooler and said cooled intake air from the charge air cooler to mix to create a mixed boost-air temperature that is just above the dew-point temperature.

31. (Original) The internal combustion engine according to claim 30, further comprising:

a valve body;

and wherein said charge air cooler bypass valve and said charge air cooler throttle valve are installed in said valve body.

32. (Original) The internal combustion engine according to claim 31, wherein said charge air cooler bypass valve comprises:

a bypass barrel;

a bypass shaft intersecting said barrel;

a bypass plate rotatably connected to said bypass shaft;

wherein said bypass valve is normally closed.

33. (Original) The internal combustion engine according to claim 31, wherein said charge air cooler throttle valve comprises:

a throttle barrel;

a throttle shaft intersecting said barrel;

a throttle plate rotatably connected to said throttle shaft;

wherein said throttle valve is normally open.

34. (Original) An internal combustion engine having at least one cylinder, an intake, a charge air cooler, and an exhaust gas re-circulator, said charge air cooler providing cooled intake air for delivery into said intake, and said exhaust gas re-circulator for introducing exhaust gas into said intake, comprising:

a charge air cooler bypass valve for diverting a first mass flow rate of intake air around the charge air cooler and into the intake manifold when said exhaust gas re-circulator is introducing exhaust gas into said intake;

said charge air cooler bypass valve comprising:

a bypass barrel;

a bypass shaft intersecting said bypass barrel;

a bypass plate rotatably connected to said bypass shaft; and

wherein said bypass plate is normally closed;

a charge air cooler throttle valve for reducing a flow of said cooled intake air into the intake manifold from the charge air cooler by a second mass flow rate when said exhaust gas re-circulator is introducing exhaust gas into said intake;

said charge air cooler throttle valve comprising:

a throttle barrel;

a throttle shaft intersecting said throttle barrel;

a throttle plate rotatably connected to said throttle shaft; and

wherein said throttle plate is normally open; and

an electronic control unit having a condensation control module adapted to control said bypass valve and said throttle valve so as to create a mixed boost-air temperature with respect to the dew-point temperature to inhibit the formation of condensation and

acids.

35. (Original) The engine according to claim 34, wherein said first mass flow rate is substantially equal to said second mass flow rate.

36. (Original) The engine according to claim 35, wherein said bypass shaft is parallel to said throttle shaft.

37. (Original) The internal combustion engine according to claim 36, further comprising:

a rack;

a bypass pinion gear on said bypass shaft;

a throttle pinion gear on said throttle shaft;

wherein said bypass pinion gear and said throttle pinion gear mesh with said rack.

38. (Original) The internal combustion engine according to claim 35, wherein said bypass shaft is substantially perpendicular to said throttle shaft.

39. (Original) The internal combustion engine according to claim 37, further comprising:

a bypass bevel gear on said bypass shaft; and

a throttle bevel gear on said throttle shaft that meshes with said bypass bevel gear.